

## **Abstract**

A hard disk device capable of detecting channels of a host to which hard disk controllers belong and are used to detect the connection relations between several channels of a host and several removable hard disk cases in the hard disk device. Each of the removable hard disk cases has a current sensor for detecting the current variation of the hard disk, transforming the variation into a voltage signal, and transmitting the voltage signal to a enclosure-controller. The enclosure-controller then converts the voltage signal into a flag. The host can read the flag via a serial bus to build the corresponding relation between the channel connected to the hard disk and the enclosure-controller. The effects of easy use and friendly operation can thus be accomplished.